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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of Brian M. Burmaster et al. Art Unit 1754  
Serial No. 09/693,418  
Filed October 20, 2000  
Confirmation No. 1265  
For PROCESS FOR THE PRODUCTION OF SULFUR  
Examiner Timothy C. Vanoy

#1313  
12/23/2

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DEC 20 2002  
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December 17, 2002

AMENDMENT B

TO THE ASSISTANT COMMISSIONER FOR PATENTS,

SIR:

In response to the Office action mailed July 17, 2002, the time for response to which is extended to December 17, 2002 under 37 C.F.R. §1.136(a), please enter the amendments:

IN THE CLAIMS:

Please amend claim 1 as follows:

1. (twice amended) A process for the production of elemental sulfur from an acid gas feed stream containing hydrogen sulfide, the process comprising the steps of:

introducing a feed gas mixture comprising at least a portion of the acid gas feed stream and sulfur dioxide into a single Claus catalytic reaction zone;

contacting the feed gas mixture with a Claus conversion catalyst in the Claus catalytic reaction zone at a temperature effective for the reaction between hydrogen sulfide and sulfur dioxide to form a product gas effluent comprising elemental sulfur and water;

cooling the product gas effluent to condense and separate elemental sulfur from the product gas effluent and form a tail gas effluent;

combusting a portion of the tail gas effluent with a source of oxygen in a combustion zone to oxidize sulfur species present in the tail gas effluent and form a combustion gas effluent comprising sulfur dioxide;